

REMARKS

The Office Action dated May 3, 2004 has been received and carefully considered. The above amendments and the following remarks are being submitted as a full and complete response to the Office Action.

Claim 1 has been amended to include the subject matter of claims 13 and 14, which was indicated as being allowable in the Office Action. Claims 13 and 14 have been canceled.

Further, claim 1 has revised to eliminate the limitation concerning a one-dimensional array of detecting elements. The subject matter of claim 14, which was indicated to be allowable, is equally applicable to one-dimensional and two-dimensional arrays of detecting elements, and therefore, the basis for allowance of claim 1, for the reasons stated in the Office Action, does not depend on the detector array having a one-dimensional structure, as previously argued.

Moreover, claims 5 and 6, which had been canceled, have been reinstated as original claims in the present application, depending from amended claim 1. Claim 19 was amended to correct a minor grammatical error. Finally, claim 15 has been amended, and claim 16 canceled, for reasons to be discussed below.

Turning more specifically to the Office Action, concerning the claim objections on page 2, the objection in part (a) is moot since the indicated passage has been eliminated from amended claim 1. It is further submitted that the use of "a" (not "an"), i.e., referring to "a one-dimensional array" is grammatically correct in claim 5. Concerning part (b), the paragraph

discussing the "image reconstructing means" has been eliminated from amended claim 15, since in essence, the same features are already recited in claim 1. Similarly, since the essential features of claim 16 are already recited in claim 1, claim 16 has been canceled, also rendering the objections in parts (c) and (d) moot.

Claims 12 and 13 were rejected under 35 U.S.C. § 112, first paragraph, as lacking adequate description and support from the present specification. The Examiner noted that claims 12 and 13 are directed to using two-dimensional aperture arrays, which was inconsistent with the former amendments to claim 1, limiting the claim to a one-dimensional array of detecting elements.

As noted above, claim 1 has been amended to remove the limitation concerning the one-dimensional array of detecting elements, thereby avoiding the inconsistency discussed in the Office Action concerning claim 12 and (former) claim 13. Claim 1 is now fully consistent with all dependent claims. Reconsideration and withdrawal of the rejection, in light of these amendments and remarks, is respectfully requested.

Concerning the cited prior art, as noted above, claim 1 has been amended to incorporate the allowable subject matter recited in former claims 13 and 14. Therefore, a detailed discussion of the cited references is not required, and the 35 U.S.C. § 103(a) rejections stated in item 6 (page 4), item 7 (page 7) and item 8 (page 8) of the Office Action are overcome by the amendments.

The Examiner has correctly noted that the cited prior art does not disclose or suggest the important advantageous feature

of the present invention, in which an observation range for a detection plane of the detecting means in an examinee is at most $L \cdot (D + Z)/D$ where L represents the length of one period of the apertures, Z the distance from the collimator to the observation position in the examinee, and D the distance from the collimator to the detecting means.

As discussed above, this conclusion is true irrespective of whether the detecting means is made up of a one-dimensional or a two-dimensional array of detecting elements. Therefore, the Examiner's indicated basis for allowable subject matter applies with equal force to amended claim 1.

Accordingly, the applicant respectfully submits that the claimed invention is both novel and non-obvious over the cited prior art. Withdrawal of the rejections, and allowance of the present application, is requested.

Currently, no fees are due. Notwithstanding, should it be deemed that other fees, or deficiencies in fees, are required in connection with this or any accompanying communication, such amounts may be charged to the Attorney's Deposit Account No. 07-2519.

Respectfully submitted,



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